# **Ecotox Report for Case # P-18-0261**

#### General

Report Status: Complete Status 11/19/2018 **CRSS Date:** Date: SAT SAT Date: Chair: Consolidated N Consolidated Set: PMN: Ecotox Related Cases: Health Related Cases: **Submitter: CAS Number: Chemical Name:** Use: Trade Name: PV-max(kg/yr): Ecotox Assessor: Kim, Anne

#### **Fate Summary Statement**

Fate Summary Statement:

## **Physical Chemical Information**

Molecular Weight: Wt% < 500: Wt% < 1000: **Physical** State - Neat: **Melting Point: Melting Point (est): MP** (EPI): Vapor Pressure (est): Vapor Pressure: (EPI): Water Solubility: Water Solubility (est): Water **Solubility (EPI):** Henry's Law::

| Log Koc:           | Log<br>Koc (EPI): |
|--------------------|-------------------|
| Log<br>Kow:<br>Log | Log<br>Kow (EPI): |
| Kow Comment:       |                   |

#### **SAT**

#### **Concern Level**

Ecotox 1
Rating (1):
 Ecotox
Rating Comment
 (1):
 Ecotox Rating
 (2):
 Ecotox
Rating Comment
 (2):
 Ecotox Route of No releases to
Exposure: water

#### **Ecotox Comments**

Exposure N
Based Review
(Eco):
Ecotox
Comments:
Exposure Based
Testing:

### **PBT Ratings**

| Persistence | Bioaccumulation | Toxicity | Comments |
|-------------|-----------------|----------|----------|
|             |                 |          |          |

## **Eco-Toxicity Comment:**

# **Fate Ratings**

| Removal in WWT/POTW (Overall): |        |   |   |                     |         |         |
|--------------------------------|--------|---|---|---------------------|---------|---------|
| Condition                      | Rating |   | ] | <b>Rating Descr</b> | ription | Comment |
|                                | Values | 1 | 2 | 3                   | 4       |         |
|                                |        |   |   |                     |         |         |

| Removal in WWT/POTW        |        |                |          |           |            |  |
|----------------------------|--------|----------------|----------|-----------|------------|--|
| (Overall):                 |        |                |          |           |            |  |
| Condition                  | Rating |                | Rating I |           | Comment    |  |
|                            | Values | 1              | 2        | 3 4       |            |  |
| Fish BCF:                  |        |                |          |           |            |  |
| Log Fish BCF:              |        |                |          |           |            |  |
| WWT/POTW                   |        | Low            | Moderate | Strong    | V. Strong  |  |
| Sorption:                  |        |                |          |           |            |  |
| WWT/POTW                   |        | Extensive      | Moderate | Low       | Negligible |  |
| Stripping:                 |        |                |          |           |            |  |
| Biodegradation<br>Removal: |        | Unknown        | High     | Moderate  | Negligible |  |
| Biodegradation             |        | Unknown        | Complete | Partial   |            |  |
| Destruction:               |        | OHMIOWII       | Compicio | i ui iiui |            |  |
| Aerobic Biodeg             |        | <=             | Weeks    | Months    | > Months   |  |
| Ult:                       |        | Days           | .,       |           |            |  |
| Aerobic Biodeg             |        | <=             | Weeks    | Months    | > Months   |  |
| Prim:                      |        | Days           |          |           |            |  |
| Anaerobic                  |        | <=             | Weeks    | Months    | > Months   |  |
| Biodeg Ult:                |        | Days           |          |           |            |  |
| Anaerobic                  |        | <=             | Weeks    | Months    | > Months   |  |
| Biodeg Prim:               |        | Days           |          |           |            |  |
| Hydrolysis (t1/2           |        | <=             | Hours    | Days      | >= Months  |  |
| at pH                      |        | Minutes        |          |           |            |  |
| 7,25C) A:                  |        |                | **       | Ъ         | . 36 (1    |  |
| Hydrolysis (t1/2           |        | <=<br>Minorton | Hours    | Days      | >= Months  |  |
| at pH<br>7,25C) B:         |        | Minutes        |          |           |            |  |
| Sorption to                |        | V.             | Strong   | Moderate  | Low        |  |
| Soils/Sediments:           |        | Strong         | buong    | Moderate  | Low        |  |
| Migration to               |        | Negligible     | Slow     | Moderate  | Rapid      |  |
| Ground Water:              |        | 00             | 2.0      |           |            |  |
| Photolysis A,              |        | Negligible     | Slow     | Moderate  | Rapid      |  |
| Direct:                    |        | 5 5            |          |           | •          |  |
| Photolysis B,              |        | Negligible     | Slow     | Moderate  | Rapid      |  |
| Indirect:                  |        | -              |          |           |            |  |
| Atmospheric Ox             |        | Negligible     | Slow     | Moderate  | Rapid      |  |
| A, OH:                     |        |                |          |           |            |  |
| Atmospheric Ox             |        | Negligible     | Slow     | Moderate  | Rapid      |  |
| B, O3:                     |        |                |          |           |            |  |
| Bio Comments:              |        |                |          |           |            |  |
| <b>Fate Comments:</b>      |        |                |          |           |            |  |

# **Ecotoxicity Values**

| Test<br>organism  | Test Type    | Test Endpoint | Predicted | Experimental Comments |  |  |
|---|--------------|---------------|-----------|-----------------------|--|--|
| Fish  | 96-h         | LC50          | *         | *= No effects at      |  |  |
|   |              |               |           | saturation            |  |  |
| Daphnid   | 48 <b>-h</b> | LC50          | *         |                       |  |  |
| Green Algae   | 96-h         | EC50          | *         |                       |  |  |
| Fish  | -            | Chronic       | *         |                       |  |  |
|   |              | Value         |           |                       |  |  |
| Daphnid   | -            | Chronic Value | *         |                       |  |  |
| Green Algae   | -            | Chronic Value | *         |                       |  |  |
| Ecotox Value Predictions are based on SARs for nonionic polymers  Comments: (insoluble); with a an unknown MP (P); S = negligible (P), reacts slowly (M); effective concentrations based on 100% active ingredients and mean measured concentrations; hardness <150 mg/L as CaCO3; and TOC <2.0 mg/L. |              |               |           |                       |  |  |

### Ecotox Factors

| Factors                  | Most<br>Sensitive<br>Endpoint | Assessment<br>Factor | CoC | Comment   |
|--------------------------|-------------------------------|----------------------|-----|---|
| Acute Aquatic (ppb):     |                               |                      |     | Acute and chronic COCs were not calculated because the toxicity values show no effects at saturation. |
| Chronic<br>Aquatic(ppb): |                               |                      |     |   |

| Factors       | Values            | Comments |
|---------------|-------------------|----------|
| SARs:         | Nonionic Polymers |          |
| SAR Class:    |                   |          |
|               |                   |          |
| TSCA          |                   | _        |
| NCC Category? | None              |          |

Recommended Potentially Useful

**Testing:** Information: None.

**Ecotox** Environmental

**Factors** Hazard: Environmental hazard is relevant to whether a new chemical **Comments:** substance is likely to present unreasonable risk because the significance

of the risk is dependent upon both the hazard (or toxicity) of the chemical substance and the extent of exposure to the substance. EPA estimated environmental hazard of this new chemical substance using predictions based on the negligible water solubility of P-18-0261 (insoluble nonionic polymer;

Acute and chronic toxicity values estimated for fish, aquatic invertebrates, and algae are all no effects at saturation. These toxicity values indicate that the new chemical substance is expected to have low environmental hazard. Because hazards are not expected up to the water solubility limit, acute and chronic concentrations of concern are not identified.

Environmental Risk: Risks to the environment were evaluated by comparing estimated surface water concentrations with the acute and chronic concentrations of concern. Risks to the environment from acute and chronic exposure are not expected at any concentration of the new chemical substance soluble in the water (i.e., no effects at saturation).

#### Comments/Telephone

#### Log

| Artifact | Update/Upload |  |
|----------|---------------|--|
|          | Time          |  |